

The April 27<sup>th</sup>, 2013 Explorers balloon launch payload descended past a nearby jet contrail made by a Cessna 680 Citation Sovereign business jet that had flown by ten to fifteen minutes earlier.

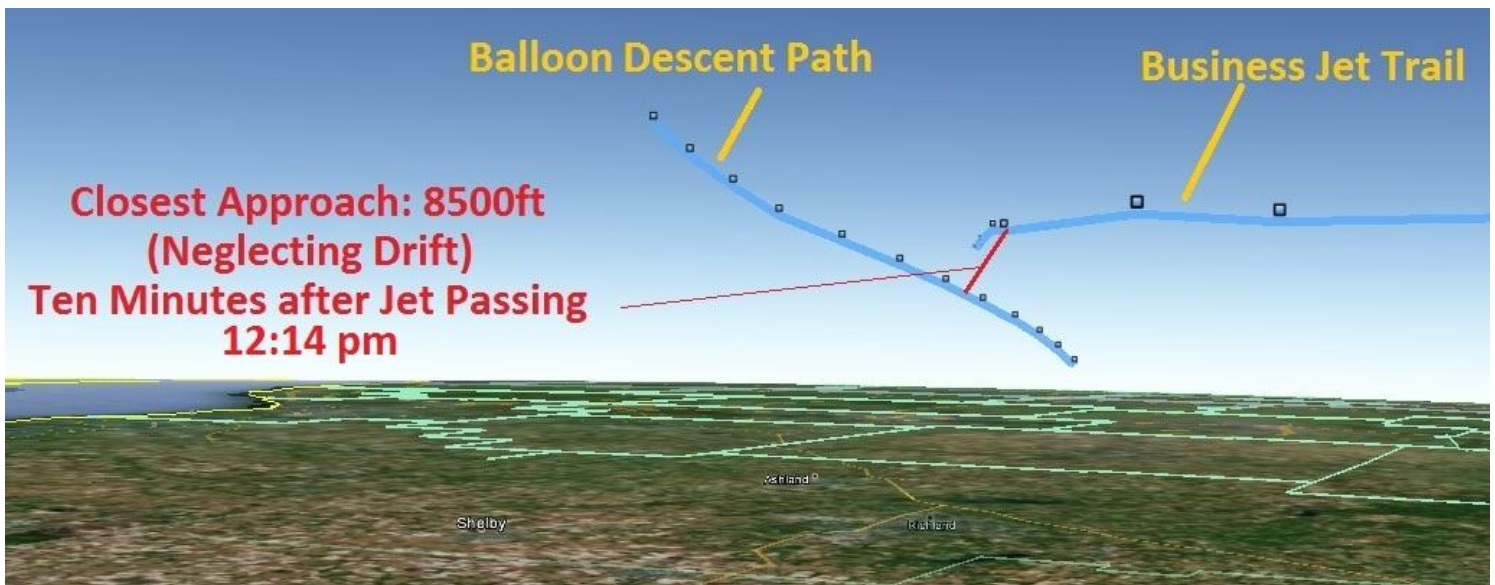


Figure 1: GPS Tracks of the Jet and Payload

The contrail can be seen in the photos and video taken from onboard the payload, marked below with green arrows.

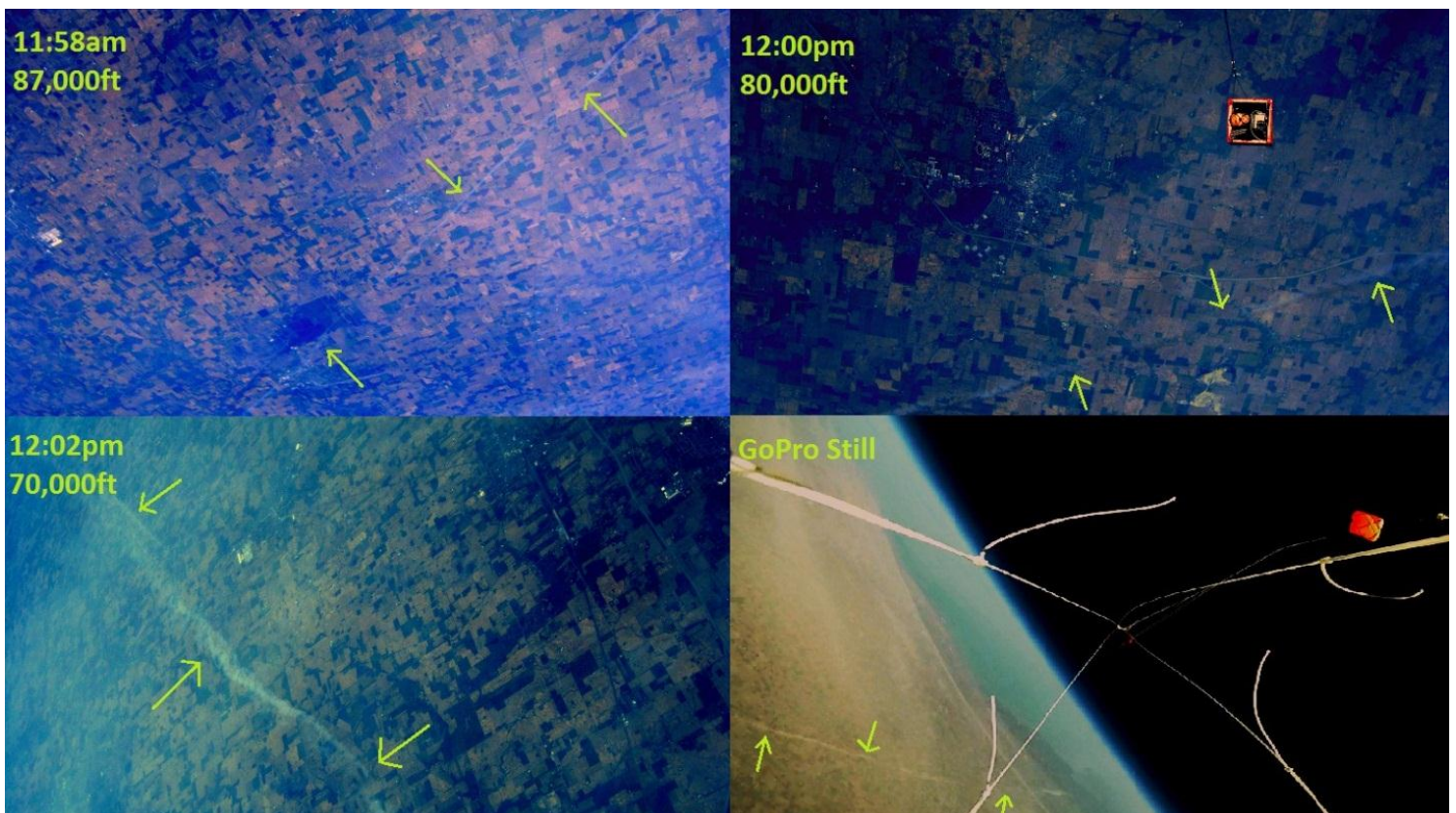
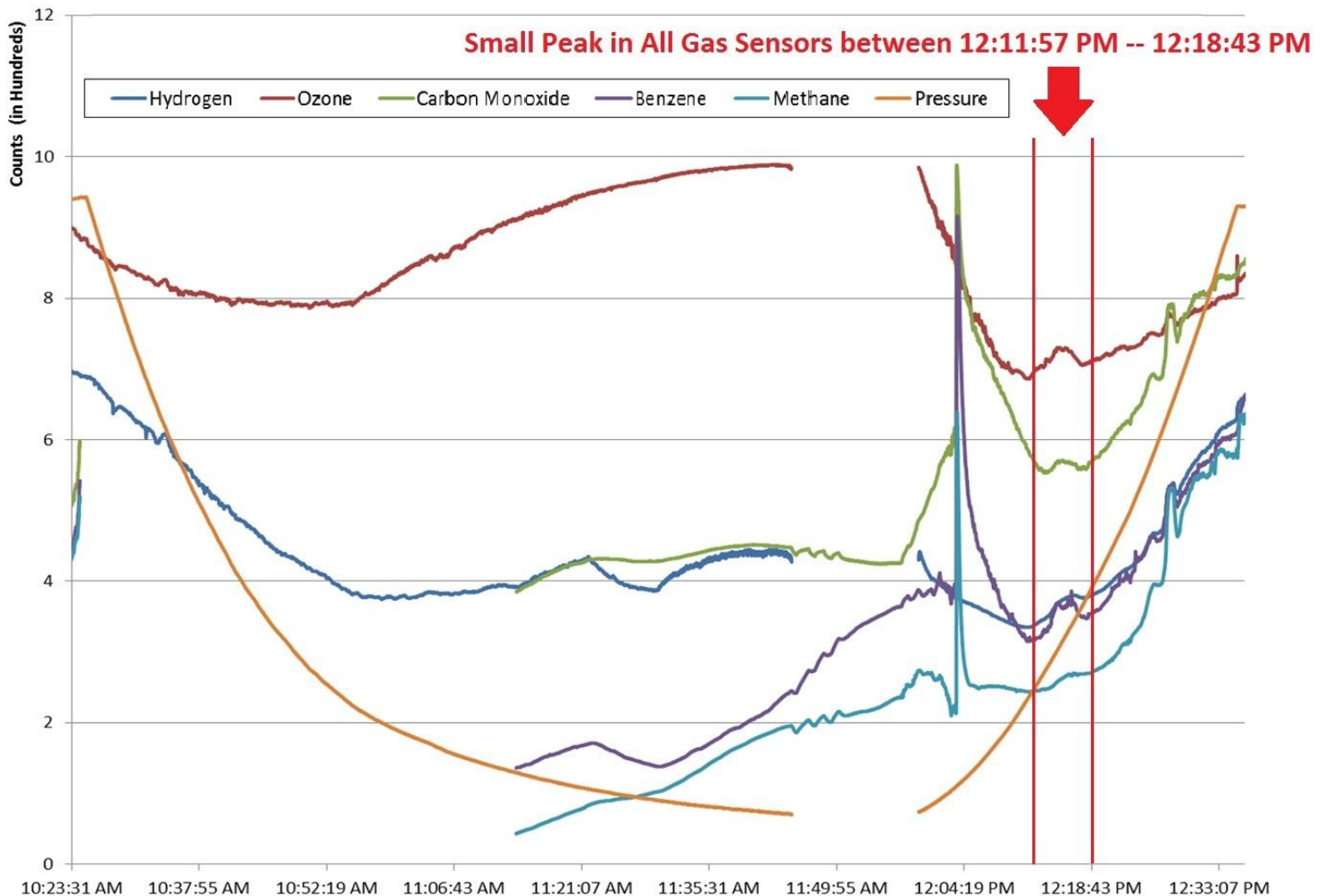


Figure 2: Photos of the Contrail

All five detectors on the gas measurement payload show a deviation from an otherwise gradual curve at the same time the balloon passes the contrail. This deviation was not seen on ascent, and is therefore likely to be due to the sensors reacting to the gasses contained in the exhaust trail from the jet.



**Figure 3: Gas Sensor Plot**

The sensors, from futulec.com, included:

COSENSOR	Carbon Monoxide (CO) Gas Sensor
MQ131	Ozone (O3) Gas Sensor
MQ135	Air Quality Control Gas Sensor (Benzene?)
MQ-8	Hydrogen
MQ-4	Methane Gas Sensor